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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,988	07/10/2001	Clive Tang	NC17536	7923
30973	7590	04/18/2005	EXAMINER	
SCHEEF & STONE, L.L.P. 5956 SHERRY LANE SUITE 1400 DALLAS, TX 75225			MEEK, JACOB M	
			ART UNIT	PAPER NUMBER
			2637	

DATE MAILED: 04/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/901,988

Applicant(s)

TANG, CLIVE

Examiner

Jacob Meek

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 - 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 5, 9 - 12, 16 - 18 is/are rejected.
- 7) ☒ Claim(s) 6 - 8, 13 - 15, 19, 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/02, 9/02.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because of handwritten drawings and captions. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 3, 9 – 12, and 16 - 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Baum et al (US-6,865,393).

With regard to claim 1, Baum discloses a communications system for dynamically selecting a switching threshold used in the selection of a modulation parameter comprising a calculator coupled to receive indicia associated with communications characteristics of communication channels during a selected interval (see column 5, lines 12 – 24 where this is interpreted as equivalent), calculator for selecting at least 1<sup>st</sup> switching threshold, 1<sup>st</sup> switching threshold selected by calculator to at least satisfy a 1<sup>st</sup> performance criteria and to satisfy at

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least a 2<sup>nd</sup> performance criteria (see column 3, lines 56 – 64 where this is interpreted as equivalent).

With regard to claim 2, Baum discloses an apparatus wherein selection of 1<sup>st</sup> switching threshold by calculator maximizes 1<sup>st</sup> performance criteria while also satisfying at 2<sup>nd</sup> performance criteria (see column 11, lines 12 – 42 where this is interpreted as including 1<sup>st</sup> and second criteria).

With regard to claim 3, Baum discloses an apparatus wherein the selected communication indicia to calculator is coupled to receive indications of errors introduced by communications channel (see column 18, lines 58 – 63 where this is interpreted as equivalent).

With regard to claim 9, Baum teaches an apparatus comprising a modulation parameter selector coupled to calculator, modulation parameter selector for selecting the modulation parameter that data is operated on by 1<sup>st</sup> communication station (see column 4, lines 22 – 42 where this is interpreted as equivalent).

With regard to claim 10, Baum teaches an apparatus wherein the modulation parameter comprises a modulation type by which data is modulated by 1<sup>st</sup> communication station (see Table 1).

With regard to claim 11, Baum teaches an apparatus wherein the modulation parameter comprises an encoding rate by which data is modulated by 1<sup>st</sup> communication station (see Table 1).

With regard to claim 12, Baum teaches an apparatus operable as software (see column 18, lines 58 – 67).

With regard to claims 16 – 18, the steps claimed as method are nothing more than a restatement of the function of the specific components of the apparatus claimed above

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(claims 1, 2, 12 respectively) and, therefore it would have been obvious, considering the aforementioned rejection of claims 1, 2, and 16.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baum et al ('393).

With regard to claim 4, Baum discloses an apparatus for use in a CDMA system. Baum is silent with respect to frame formatted data and frame error rates. Baum discloses ability to use BER and WER counts as error criteria. It would have been obvious to one of ordinary skill in the art at the time of invention that FER would be useful as an error measurement technique in a CDMA system.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baum et al ('393) in view of Masters et al (US-6,330,278).

With regard to claim 5, Baum teaches a wireless communication system for the transmission of wireless data from the 1<sup>st</sup> to a 2<sup>nd</sup> station. Baum is silent with respect to the feedback mechanism. Masters describes a feedback mechanism for the 2<sup>nd</sup> station to provide feedback to the 1<sup>st</sup> station regarding channel characteristics (see column 4, lines 15 – 29 where this is interpreted as equivalent). It would have been obvious to one of ordinary skill in the art at the time of invention to utilize Master's feedback technique in Baum's system

to produce a system with improved operating characteristics in a wireless environment (see Master's, column 1, lines 8 – 12).

***Allowable Subject Matter***

5. Claims 6 – 8, 13 – 15, 19, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Other Cited Prior Art***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Le-Ngoc (US-6,714,551) discloses system and method of maintaining transmission quality of a wireless network. Shahr et al (US 2003/0002495) discloses an adaptive modulation scheme for wireless broadband. Yoshida (US-6,359,934), Bohnke et al (US 2002/0102940), and Edwards et al (US-6,198,734) disclose adaptive modulation techniques.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Meek whose telephone number is (571)272-3013. The examiner can normally be reached on 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571)272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMM



JAY K. PATEL  
SUPERVISORY PATENT EXAMINER